

Flow sensor SFAE-10U-Q4-PNLK-PNVB-2.5K

Part number: 8207435

FESTO



Data sheet

| Feature | Value |
|--|---|
| Approval | RCM trademark |
| CE mark (see declaration of conformity) | To EU EMC Directive In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC To UK RoHS instructions |
| Note on materials | RoHS-compliant |
| Measured variable | Volume Volumetric flow rate |
| Flow direction | Unidirectional |
| Measuring principle | Thermal |
| Start value for flow rate measuring range | 0 l/min |
| End value for flow rate measuring range | 10 l/min |
| Operating pressure | -0.09 MPa...1 MPa -0.9 bar...10 bar -13.05 psi...145 psi |
| Overload pressure | 1.6 MPa 16 bar 232 psi |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] Nitrogen |
| Note on operating and pilot medium | Ester oil < 0.1mg/m ³ , according to ISO 8573-1:2010 [---:2] |
| Media temperature | 0 °C...50 °C |
| Ambient temperature | 0 °C...50 °C |
| Nominal temperature | 23 °C |
| Resolution ADC | 12 bit |
| Accuracy of flow rate | ± (5% o.m.v. + 2% FS) |
| Repetition accuracy offset in ± %FS | 0.5 %FS |
| Repetition accuracy span in ± %FS | 1 %FS |
| Switching output | 2 x PNP or 2 x NPN, switchable |

| Feature | Value |
|--|--|
| Switching function | Window comparator Threshold value comparator Threshold value with variable hysteresis |
| Switching element function | N/C or N/O contact, switchable |
| Switch-on time | 10 ms |
| Switch-off time | 10 ms |
| Max. output current | 100 mA |
| Analogue output | 0 - 10 V 1 - 5 V |
| Flow characteristic curve start value | 0 l/min |
| Flow characteristic curve end value | 10 l/min |
| Output characteristic curve start value | 0 V |
| Output characteristic curve end value | 10 V |
| Rise time | 10 ms |
| Min. load resistance voltage output | 10 kOhm |
| Display range start value | 0 %FS |
| Display range end value | 99 %FS |
| Short circuit current rating | yes |
| Overload protection | Available |
| Protocol | IO-Link® |
| IO-Link, revision ID | V1.1 |
| IO-Link, device profile | Firmware update Function locator Function Product URI Function Quantity detection Identification and diagnostics Smart sensor - SSP 4.1.1 |
| IO-Link, transmission rate | COM3 |
| IO-Link, SIO-Mode support | Yes |
| IO-Link, port type | Class A |
| IO-Link, process data length output | 0 bit |
| IO-Link, process data length input | 32 bit |
| IO-Link, Process data content IN | Flow rate measured value 16-bit MDC Flow rate monitoring 2-bit SSC Volume pulse 1 bit SSC |
| IO-Link, Service data IN | Device temperature 16 bit Volume measurement 32 bit Temperature of medium 16 bit |
| IO-Link, minimum cycle time | 0.7 ms |
| IO-Link, Data storage required | 0.5 KB |
| Operational voltage range DC | 22 V...26 V |
| Reverse polarity protection | For all electrical connections |
| Electrical connection 1, connection type | Cable |
| Electrical connection 1, connector system | Open end |
| Electrical connection 1, number of connections/cores | 4 |
| Cable length | 2.5 m |
| Max. cable length | 20 m with IO-Link® operation 30 m |
| Type of mounting | In-line installation With through-hole With accessories |
| Mounting position | optional |
| Pneumatic connection | For push-in connector O.D. 4 mm |
| Pneumatic connection, outlet direction | Straight |
| Product weight | 41.2 g |
| Material housing | PA-reinforced |

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|---|---|
| Material in contact with the medium | Epoxy Nickel-plated brass NBR PA-reinforced Process instruction High-alloy stainless steel |
| Display type | LED indicator 2-digit |
| Degree of protection | IP40 |
| Pressure drop | 50 mbar |
| Corrosion resistance class CRC | 2 - Moderate corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 4 according to ISO 14644-1 |